



SHILAP Revista de Lepidopterología

ISSN: 0300-5267

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Sociedad Hispano-Luso-Americana de  
Lepidopterología  
España

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SHILAP Revista de Lepidopterología, vol. 45, núm. 178, junio, 2017, pp. 255-258

Sociedad Hispano-Luso-Americana de Lepidopterología  
Madrid, España

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# New Species for the Fauna of Turkey with description of genitalia of *Acrobasis farsella* Amsel, 1950 (Lepidoptera: Pyraloidea)

K. Akin & E. Seven

## Abstract

*Agriphila cyrenaicella* Ragonot, 1887 and *Acrobasis farsella* Amsel, 1950 are new records for the Pyraloidea fauna of Turkey. While the male genitalia of *A. farsella* are redescribed, the female genitalia are described for the first time. Besides, figures of the species are presented in the study.

KEY WORDS: Lepidoptera, Pyraloidea, *Agriphila cyrenaicella*, *Acrobasis farsella*, male, female genitalia, Turkey.

## Nuevas especies para la fauna de Turquía con la descripción de la genitalia de la hembra de *Acrobasis farsella* Amsel, 1950 (Lepidoptera: Pyraloidea)

## Resumen

*Agriphila cyrenaicella* Ragonot, 1887 y *Acrobasis farsella* Amsel, 1950 son nuevas citas para la fauna de Pyraloidea de Turquía. Se vuelve a describir la genitalia del macho de *A. farsella*, pero la genitalia de la hembra se describe por primera vez. Además, se presentan fotografías de la especie en el trabajo.

PALABRAS CLAVE: Lepidoptera, Pyraloidea, *Agriphila cyrenaicella*, *Acrobasis farsella*, genitalia de la hembra, Turquía.

## Introduction

Pyraloidea includes about 16.000 species worldwide (SOLIS, 2007). Taking the recent publications on the Pyraloidea of the eastern Turkey into consideration, the number of Pyraloidea species in Turkey is 652 (KOÇAK, 2014; KEMAL & KOÇAK, 2016; AKIN, 2016).

*Agriphila cyrenaicella* (Ragonot, 1887) was described from Gabes (Tunisia). It is distributed in Portugal, Spain, Sardinia, Sicily, Greece, Crete, Cyprus, Transcaucasia, N. Africa, Israel, Iraq, Iran, Syria and C. Asia (SLAMKA, 2008). Later, it was reported by CATANIA (2011) from the Maltese Islands. Its larva feeds on Poaceae species (YLLA *et al.*, 2008).

*Rhodophaea farsella* Amsel, 1950 was described from Iran based on two males and three females specimens. While describing *R. farsella*, Amsel provided a detailed morphology of the adult but defined male genitalia briefly. Also he did not give any description of the female genitalia (AMSEL, 1950). *R. farsella* is included in genus *Acrobasis* on GLOBIZ which is a significant on-line platform of Pyraloidea (NUSS *et al.*, 2003-2015). Previously, *A. farsella* was known only from Iran.

The aim of this study is to contribute to the Pyraloidea fauna of Turkey. Besides, male genitalia of *A. farsella* are redescribed and female genitalia are described here for the first time.

## Material and methods

The specimens were collected in Şirvan district (Siirt province) and Batman province by using light traps. The genitalia were prepared according to ROBINSON (1976). The specimens were diagnosed based on both adult and genitalia. For the identifications of *A. cyrenaicella* and *A. farsella*, the studies by SLAMKA (2008), BŁESZYŃSKI (1965) and AMSEL (1950) as well as a virtual type sample of SMNH (GUSTAFSSON, 2005) were used respectively.

## Results

*Agriphila cyrenaicella* (Ragonot, 1887) (Figs. 1-3)

Material examined: TURKEY: 3 ♂♂ (G.P. 2015-55 E.S.), Batman Prov., Batiraman, 570 m, 15-X-2015, leg. E. Seven.

*Acrobasis farsella* (Amsel, 1950) (Figs. 4-8)

Material examined: TURKEY, 3 ♂♂, 1 ♀, Siirt Prov., Şirvan: 1 ♂ (G.P. 243 K.A.), Tomdere, 730 m, 4-VI-2011; 2 ♂♂, 1 ♀ (G.P. 257 K.A.), Şirvan-centre, 1020 m, 19-V-2012; 30-VI-2013; 10-VI-2015, leg. E. Seven.

Male genitalia (Redescription) (Figs. 5-7): Uncus triangular. Gnathos almost as long as uncus, apex bifurcate. Tegumen with slightly enlarged lateral parts. Transtilla terminal-medially fused with two arms, apex slightly sunken. Anellus U-shaped with slender and straight lateral arms. Valve elongate and with costal enforcement. Valve with clasper which is tongue-shaped, and pointed towards apex. Sacculus almost 1/2 length of valve. Vinculum U-shaped, almost equal length and width, base concave. Aedeagus without cornutus, length about 3.7 X of width. Distal end of aedeagus sickle-shaped. Culcita one component.

Female genitalia (Fig. 8): Papillae anales subtriangular. Antrum membranous. Bursa copulatrix crescent-shaped, length about 2.5 X width, situated ventro-discally with outward lobes. Two crescent-like structures in bursa copulatrix, slightly sclerotized, almost equal length, ending before reaching apex of bursa copulatrix. Signum annular, almost discal. Ductus seminalis at apex of bursa copulatrix. Ductus bursae roundish and dotted. Apophyses posteriores about equal length with apophyses anteriores, but latter thicker.

Occurrence of both species, *A. cyrenaicella* and *A. farsella* in Turkey is important in terms of the new faunal areas. Furthermore, Turkey is the second record for *A. farsella* in the West Palaearctic. With the present study, the number of pyraloid species in Turkey rises to 654.

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(Recibido para publicación / *Received for publication* 4-VIII-2016)

(Revisado y aceptado / *Revised and accepted* 22-X-2016)

(Publicado / *Published* 30-VI-2017)

